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(71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N.V.** [NL/NL];  
Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BOYLE, Kevin, R.** [GB/GB]; Philips Intellectual Property & Standards,  
Cross Oak Lane, Redhill, Surrey RH1 5HA (GB). **DE**

**GRAAUW, Antonius, J., M.** [NL/NL]; Philips Intellectual Property & Standards, Cross Oak Lane, Redhill, Surrey RH1 5HA (GB). **MILSOM, Robert, F.** [GB/GB]; Philips Intellectual Property & Standards, Cross Oak Lane, Redhill, Surrey RH1 5HA (GB).

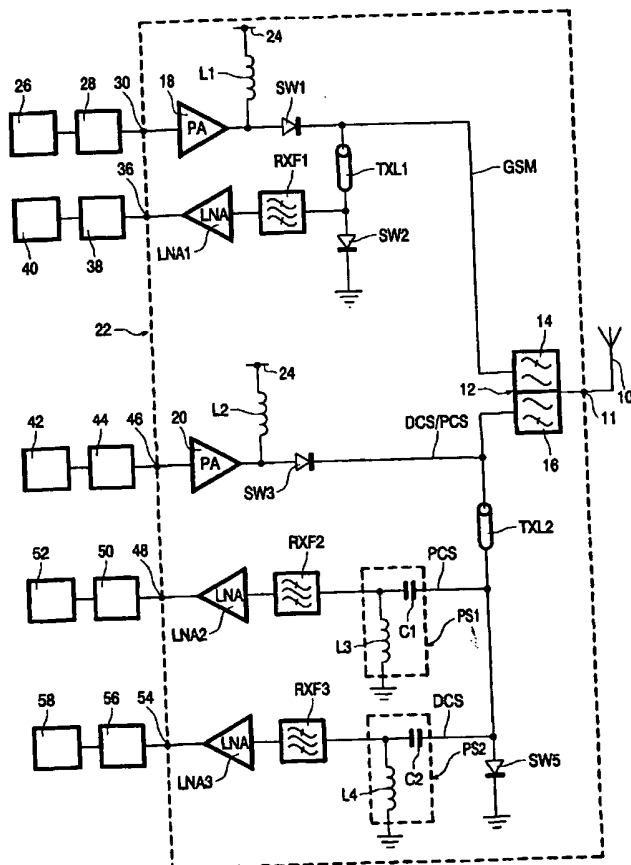
(74) Agent: **WHITE, Andrew**; Philips Intellectual Property & Standards, Cross Oak Lane, Redhill, Surrey RH1 5HA (GB).

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(54) Title: HIGH FREQUENCY MODULE



(57) Abstract: A multi-mode radio module (22) comprises a terminal (11) for connection to an antenna (10). A transmitting branch (DCS/PCS) and a branching circuit are coupled to the terminal (11). The branching circuit comprises at least a first and a second branch for receiving signals in first and second frequency bands (DCS, PCS), respectively. Each of the first and second branches comprise, respectively, a phase shifting circuit (PS1, PS2), a BAW or SAW band pass filter (RXF2, RXF3) coupled to the phase shifting circuit, the bandwidth of the filter being selected to pass a wanted signal in one of the first and second frequency bands but reject an unwanted signal in the other of the second and first frequency bands, and a low noise amplifier (LNA2, LNA3) coupled to an output of the band pass filter. The response of each of the band pass filters (RXF2, RXF3) is phase shifted to present an open circuit at the wanted frequency in the other branch. Each of the phase shifting circuits (PS1, PS2) is impedance transforming so that higher impedance filters can be used.

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